



Wind indicator system

INDICATORS & WIND SENSORS



A NEW STANDARD IN BRIDGE INDICATION

Wind measuring solutions for any marine application

The new XDi-N comes with a preinstalled standard wind indicator library containing a selection of virtual wind indicators to choose from. Available in three different physical sizes, the wind indicator series works perfectly with all of DEIF's ultrasonic wind sensors, the WSS series.

Simply combine either the high performance WSS 750 wind sensor or the standard WSS 500 series with one or more of the XDi-N wind indicators to form the exact wind measuring system you need.

- ▶ XDi 96 N is the perfect choice when panel space is limited; despite the small size, the bright colour display provides a surprisingly good viewing distance.
- ▶ XDi 144 N can be used in the control panels or in the overhead consoles.
- ▶ XDi 192 N is perfect for overhead panels, where the large colour display offers long distance viability.

Optimised panel space – customised display designs

The increased complexity of modern ships has made panel space a limited resource. Benefit from the modular design of the XDi series to obtain an outstanding bridge design while reducing the need for panel space. Or have your own fully customised library created – containing virtual indicators with a unique graphical design perfectly matching other indicators or displays in your product line (for instance propulsion indicators). This makes it possible to offer a uniform bridge design to shipyards and shipowners.

Built for navigation system integration

Developed with system integration in mind, the XDi-N series comes with flexible NMEA interface and two CAN ports, supporting CANopen with the unique XDi-net plug and play layered on top. Using a modular interface extension concept, extension modules can be added to indicators.

In plain terms, this is yet another game-changing solution from DEIF.



FARSTAD
UT 754 WP

IMO 9516175

FAR SOLITAIRE

Flexible display indicator – wind

Flexible wind system solution in control



The XDi Navigation version (XDi-N) is the top model of the XDi series of display-based indicators. Compact, easy-to-install, versatile and user-friendly, the complete range of XDi bridge indicators takes the well-known DEIF qualities in both product performance and logistic handling to a new level.

The ultimate all-in-one solution, the XDi-N saves you panel space and installation time, gives you greater choice, more flexibility and the ability to configure and make repairs on-site.

XDi-N main wind indicator

The XDi-N main indicator is delivered with one NX2 NMEA input/output (I/O) module that in most cases covers all the needs for NMEA I/O. Adding one extra NX2 extension module on the XDi 144 N or XDi 192 N adds another set of I/O ports.

XDi-N wind repeater

The XDi-N wind repeater indicator has the same functions as the main unit, use exactly the same indicator library, but receives data via CAN bus (XDi-net), and therefore no NMEA extension module is required.

NMEA data interface

The standard input for XDi navigation indicators are NMEA data in compliance with IEC 61162-1. Supported NMEA data for wind indicators:

- ▶ Relative wind speed and direction
- ▶ True and geographic true wind speed and direction
- ▶ Heading, water speed, speed over ground, longitudinal speed for true/geographic wind calculations

XDi-N features

- ▶ TFT graphical LED 3.5, 5 or 7" display
- ▶ 96, 144 or 192 DIN cutouts
- ▶ Two CAN ports for easy interfacing
- ▶ XDi-Net – add multiple XDi indicators
- ▶ Redundant power inputs
- ▶ Compatible with wind sensors providing NMEA data (such as DEIF's ultrasonic wind sensors)
- ▶ Up to six NMEA compatible inputs
- ▶ Up to four NMEA outputs
- ▶ Relative, true & geographic wind indication
- ▶ Toggle between up to four predefined indicator screens
- ▶ Quick-switch between wind speed measuring units (knots, m/s or m/h, km/h, beaufort)
- ▶ Dimmer controllable using front/external push-buttons, analogue, NMEA or CAN/XDi-net
- ▶ Standard day and night designs
- ▶ Customised indicator designs available on request
- ▶ Optional analogue or digital input
- ▶ Optional wind warning and alarms/relay output
- ▶ Optional IP66 protection

Variants

Extension modules

XDi-N Main

NX2

XDi-N Repeater

None required

Accessories

- ▶ Wind sensor extension cables
- ▶ IP66 connector box kit
- ▶ IP67 connector kit (WSS 500 series)
- ▶ Dimmer potentiometer kit
- ▶ AX1 analogue extension module
- ▶ DX1 digital extension module
- ▶ NX1 NMEA output extension module
- ▶ NX2 NMEA I/O extension module
- ▶ Front frames

Approvals



Variants & extension modules

Solutions customised to your requirements

Variants

XDi-N Main Wind Indicator

With NX2 NMEA input/output module
(share data on XDi-net).



XDi 96 N



XDi 144 N



XDi 192 N

XDi-N Wind Repeater

Input: XDi-net
No NX2 input/output module required.



XDi 96 N



XDi 144 N

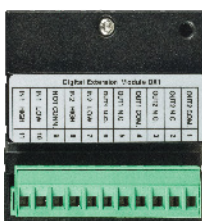


XDi 192 N

Extension modules

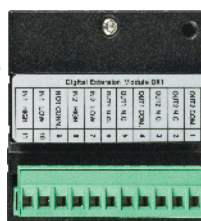
Maximum one extension module for XDi 96 and two for XDi 144/192.

The 'quick snap-on' extension modules can be delivered separately or together with your XDi unit.



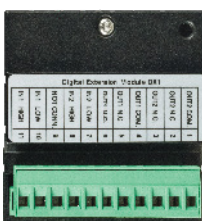
AX1

Analogue inputs, dimmer input and reference output for external potentiometer



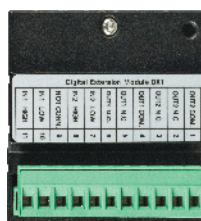
DX1

Digital inputs, e.g. for RPM pick-up sensors.
Relay outputs for external alarm/control



NX1

NMEA0183 output module for data transfer to VDR, DP system or navigation system. Two contact inputs for remote push button control.



NX2

NMEA0183 serial I/O module for integration in ship navigation systems. Two contact inputs for remote push button control.

Wind sensor static, WSS 500/550

Ultrasonic measuring equals no wear, no tear



The ultrasonic measuring principle with no moving parts gives reliable performance without any wear-out problems and without requiring regular service.

The new WSS 550 version has a built-in heating element to prevent icing up.

WSS 500 & 550 can both be connected directly to a control system and concurrently send data to an XDi-N wind speed and direction indicator placed on the bridge.

An obvious alternative if you want high performance and reliability – not low-cost/high-maintenance!

WSS 500/550 features

- ▶ Measures wind speed and direction
- ▶ IP66 housing
- ▶ Intelligent heating prevents icing up
- ▶ Working temperature down to -40 °C
- ▶ Well-proven and robust technology
- ▶ Advanced system integration with XDi-N
- ▶ Plug'n'play replacement for WSS/WSS-L
- ▶ Fully compatible with WSDI-2 indicators
- ▶ All relevant major class approvals

Variants

Features

WSS 550	With heating
WSS 500	Without heating

Application example

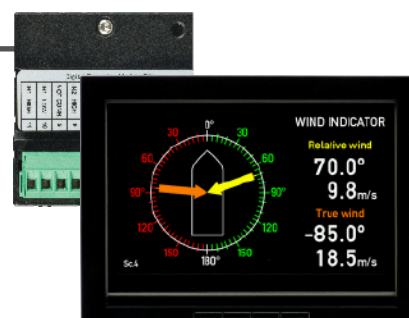
Standard relative wind indicator system



WSS 500

RS485

NX2



XDi 192-N w/standard wind indicator library

The RS485 port is used to receive NMEA data from the windsensor

Wind sensor, WSS 750

Superior accuracy perfect for critical applications



Two years of field testing in the North Sea and Norway's polar region have proven DEIF's new WSS 750 wind sensors' reliability in providing superior wind measuring performance in all weather conditions.

The robust construction and high measuring accuracy make this sensor series the right choice for applications where precise and reliable wind data is essential to safe operation.

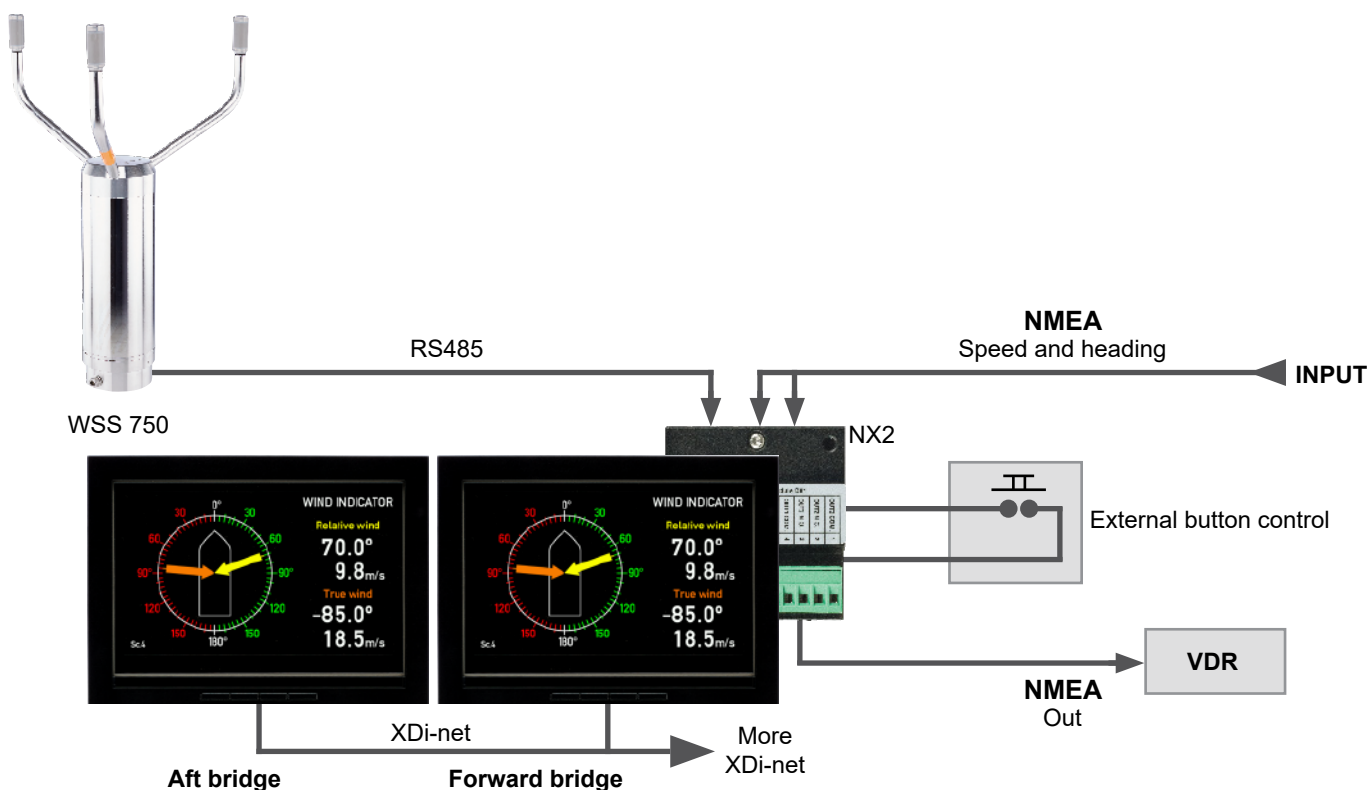
The WSS 750 is also highly recommended for use in dynamic positioning systems and other critical applications.

WSS 750 features

- ▶ Well-suited for dynamic positioning systems
- ▶ All stainless steel construction
- ▶ High power ultrasonic transducers in an equal-sided triangle constellation
- ▶ No moving parts; no wear
- ▶ Wind speed up to 65 m/s (120 Knot)
- ▶ Speed accuracy better than 3 % (min. +/-0.2 m/s)
- ▶ Direction accuracy better than +/- 2°
- ▶ NMEA protocol
- ▶ IP66 and IP67 fully waterproof
- ▶ Automatic power and gain control – automatic signal strength increase in case of rain or snow
- ▶ Built-in heating
- ▶ Working temperature down to -40 °C
- ▶ Advanced system integration with XDi-N
- ▶ Plug'n'play upgrade for WSS/WSS-L
- ▶ All relevant major class approvals

Application example

Advanced wind system - Relative, true, geographic with NMEA output





DEIF A/S

Frisenborgvej 33, 7800 Skive, Denmark

Tel. +45 9614 9614

LEARN MORE AT WWW.DEIF.COM/MARINE-OFFSHORE

